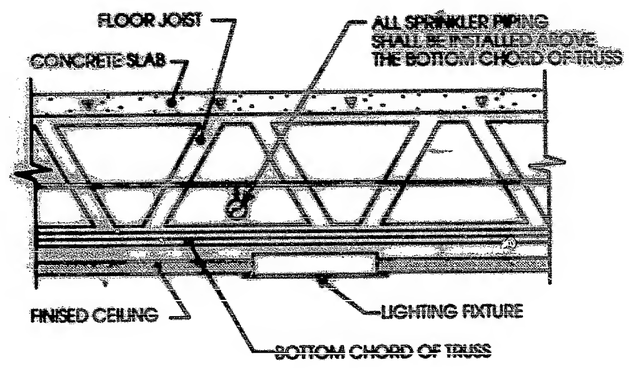
SPRINKLER SPECIFICATIONS

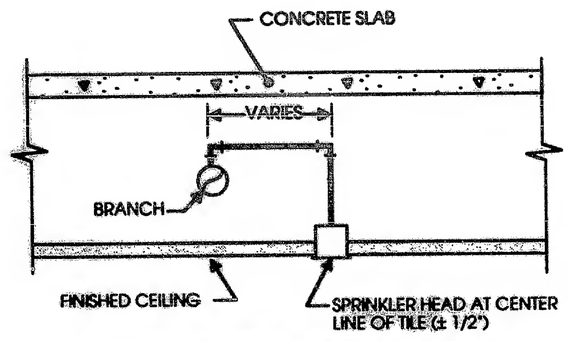
1. **Shut**[illegible]wn of existing system: At the time that such closing or opening of valve[illegible] and draindown becomes necessary, the Contractor shall notify the Wa[illegible] Construction Division (at least 48 hours in advance) who will make the nec[illegible]ary arrangements. The Contractor shall keep the shutdown time to a m[illegible]imum and drainage shall be to a properly connected receptacle with[illegible] causing damage to other work and property.
2. **Hea**[illegible]
   Spri[illegible]r Heads shall be Reliable Automatic Sprinkler Co. concealed type Mo[illegible] CM 165 degree F rating, 1/2" orifice or approved equal. Polished chro[illegible]e.
3. **Pipe**[illegible]d Fi[illegible]
   Pipe[illegible] shall b[illegible] Schedule 40, standard weight, black steel pipe, ASTM A53-78/[illegible] Fittings shall be cast iron, 150 lbs. class threaded.
4. **All p**[illegible]ng parallel to the exterior wall and within 15 feet shall be insulated.
5. **Pipe**[illegible] and fittings shall be insulated where required by the contract cl[illegible]ge with one inch (1") thick heavy density fiberglass pipe covering wit[illegible] factory applied all service jacket (ASJ), self-sealing lap and butt strips bon[illegible]d with aluminum straps (2' on centers), and pre-molded fiberglass for[illegible]gs. Insulation shall be similar in all respects to that manufactured by Ow[illegible] Corning Fiberglass
6. **Pipi**[illegible] shall be installed to drain back to flow control valve.
   Cli[illegible] main shall be above bottom chord of truss
   Bran[illegible]ch lines shall run through bridging trusses.
7. **Flus**[illegible]
   Bef[illegible]final connections and sprinkler heads are installed, all piping shall be th[illegible]roughly blown out, reamed out, and washed out at least twice in a man[illegible] as directed by the Engineer to remove all accumulation of dirt, chip[illegible] or other deleterious material. Make all temporary connections and furnish[illegible] all appliances required for the purpose of cleaning at no extra expe[illegible]se to the Authority.
8. **Pipe** passing through walls shall have a trim opening cut no greater than necessary for the installation of a sleeve secured therein. Sleeves shall be made of Schedule 40 galvanized steel pipe for floor slabs and 20 gauge sheet metal for framed partitions.Sleeves shall be 1/2" in diameter larger than the outside diameter of the pipe or required insulation passing through, and of sufficient length to be flush with the finished wall surface. Annular spaces between piping and sleeves or core drilled floor openings shall be packed with thermafiber and sealed to retain the fire integrity of the walls and floors with a non-hardening compound similar and equal to Dunseal as manufactured by J. M. Clipper Co.
9. **Hangers**
   Install suitable clevis type hangers supported from the existing building steel framing. Drilling/anchoring systems will be permitted. Drilling only when approved by the Engineer. Use Hilti HDU anchors.

Pipe Size	Max. Hanger Spacing	Min. Rod Size
1"	8'-0" O.C.	3/8"
1-1/4" to 2"	10'-0" O.C.	3/8"
2-1/2" to 3"	12'-0" O.C.	1/2"

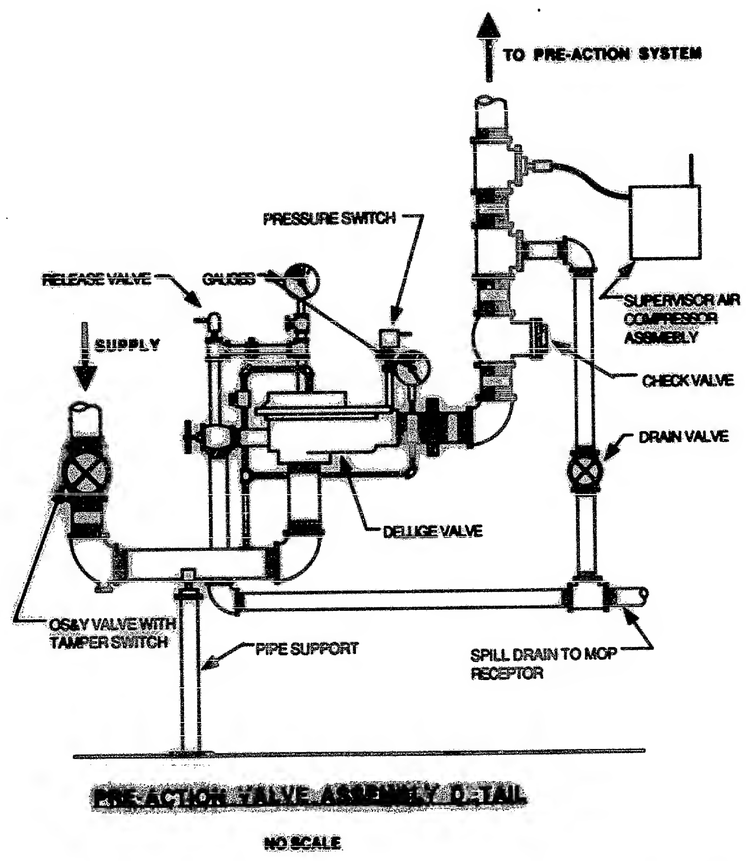
10. **Valves**
    Gate Valve-OS & Y - Jenrikens Bros. Fig. #825-A flanged ends 175 lbs. W.W.P.
    Check Valve - Jenrikens Bros. Fig. #629, flanged ends 175 lbs. W.W.P.
11. **Pre-Action system shall** Model 2000 "Superior", as manufactured by the Reliable Automatic Sprinkler Co. System shall include Model "A" 2 1/2" deluge valve, Model "A" air compressor panel, alarms, Model "E" valve trim, battery cabinet, etc.
12. **Tamper Switch:**
    Acme Fire Alarm Co. Model #443, plug type, closed circuit, single contact,securely mounted on wall with cable of sufficient length looped through valve hand wheel.
13. **All piping shall be installed above the bottom chord of the trusses.**
14. **Affix identification makers on all sprinkler piping. Makers shall be at 10' - on centers. Makers shall be Brady Snap-On, Type 8, W.H. Brady Co. Sign Mark Division. Markers shall read "SPRINKLER PIPING" and " PRE-ACTION SPRINKLER PIPING"**
15. **Test**
    Entire installation shall be tested hydrostatically and remain tight with no loss of pressure for a period of no less than two (2) hours against a pressure of 200 psig. Remaining portion of the floor system shall be isolated from the test procedure.
16. **Co**[illegible]
    Entire installation shall comply with all provisions of the NYC Building Code.
17. **Disturbance of structural fireproofing shall be kept in a minimum and precaution shall be observed for work above the ceiling.**
18. **Contractor shall submit detailed shop drawings to the Engineer for approval. No work shall commence until approval is obtained.**
19. **Provide hydraulic calculations for both Pre-Action and wet pipe systems. All friction losses shall be included in the calculations.**



DETAIL OF LOCATION OF PIPE IN SUSPENDED CEILING
NOT TO SCALE



DETAIL OF TYPICAL PIPING CONNECTION TO SPRINKLER HEAD
NOT TO SCALE



PRE-ACTION VALVE ASSEMBLY DETAIL
NO SCALE